Revised 02/20/01

#5

JC986 U.S. PTO 09/859701 05/16/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Benjamin P. Warner et al. Docket No.: S-94,661

Serial No.: Examiner:

Filed : Art Unit:

For : METHOD FOR DETECTING BINDING EVENTS USING MICRO-X-RAY FLUORESCENCE SPECTROMETRY

Assistant Commissioner for Patents
Washington, DC 20231

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.56, 1.97, AND 1.98

Sir:

The documents listed below, copies attached, may be material to the examination of the subject application and is therefore submitted in compliance with the duty of disclosure defined in 37 CFR 1.56.

1. Michael C. Pirrung et al., "Large Scale Photolithographic Solid Phase Synthesis of Polypeptides and Receptor Binding Screening Thereof," U.S. Patent 5,143,854, issued September 1, 1992.

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

☒ deposited with the United States Postal Service with sufficient postage as first class mailin an envelope addressed to the: Assistant Commissioner for Patents, Washington, DC 20231.

FACSIMILE

☐ transmitted by facsimile to the United States Patent and Trademark Office.

Samuel L. Borkowsky
Signature

Date May 16, 2001

Samuel L. Borkowsky
(type or print name of person certifying)

2. Stephen P. A. Fodor et al., "Method and Apparatus for Measuring Binding Affinity," U. S. Patent 5,324,633, issued June 28, 1994.

3. William J. Dower et al., "Sequencing of Surface Immobilized Polymers Utilizing Microflourescence Detection," U.S. Patent 5,547,839, issued August 20, 1996.

4. Peter J. Schatz et al., "Peptide Library and Screening Method," U. S. Patent 5,733,731, issued March 31, 1998.

5. William J. Dower et al., "Analysis of Surface Immobilized Polymers Utilizing Microfluorescence Detection," U.S. Patent 5,902,723, issued May 11, 1999.

6. Peter G. Schultz et al., "Combinatorial Synthesis of Novel Materials," U.S. Patent 5,985,356, issued November 16, 1999.

7. Jeffrey Van Ness et al., "Methods and Compositions for Enhancing Sensitivity in the Analysis of Biological-Based Assays," U.S. Patent 6,027,890, issued February 22, 2000.

8. W. Henry Weinberg et al., "Combinatorial Synthesis and Analysis of Organometallic Compounds and Catalysts," U.S. Patent 6,030,917, issued February 29, 2000.

9. Eric W. McFarland et al., "Optical Systems and Methods for Rapid Screening of Libraries of Different Materials," U.S. Patent 6,034,775, issued March 7, 2000.

10. Michael Pirrung et al., "Very Large Scale Immobilized Peptide Synthesis," WO/90/00081, filed June 7, 1990.

11. Francis A. Carey, "Organic Chemistry," McGraw-Hill Book Company, pp 1086-1087.

12. J. M. Jaklevic et al., "X-Ray Fluorescence Analysis Applied to Small Samples," LBL-6451.

13. M. L. Rivers et al., "X-Ray Fluorescence Microscopy," BNL-44741, (1990).

14. E. D. Isaacs et al., "Synchrotron X-Ray Microbeam Diagnostics of Combinatorial Synthesis," Appl. Phys. Lett., vol. 73, no. 13, pp 1820-1822 (1998).

15. Jenkins, "X-Ray Fluorescence Spectrometry," 2nd ed., John Wiley & sons, pp 53-92 (1999).

16. Robert A. Carlton et al., "Qualitative Analysis of Solid Phase Synthesis Reaction Products by X-Ray Spectrometry," Microscopy and Microanalysis, vol. 3, no. 6, pp 520-529 (1997).

17. J. P. Neilly et al., "Elemental Analysis of Individual Combinatorial Chemistry Library Members by Energy-Dispersive X-Ray Spectroscopy," Applied Spectroscopy, vol. 53, no. 1, pp 74-81 (1999).

18. A. Berkessel et al., "Discovery of Peptide-Zirconium Complexes that Mediate Phosphate Hydrolysis by Batch Screening of a Combinatorial Undecapeptide Library," Angew. Chem. Ind. Ed, vol. 38, no. 1/2, pp 102-105 (1999).

This Information Disclosure Statement is not to be construed as a representation that a search has been made, that additional matter material to the examination of this application does not exist, or that any one or more of these citations constitutes prior art under 35 U.S.C. 102.

It is requested that the above citations be made of record in the prosecution of this application.

Respectfully submitted,

Date: May 16, 2001

Signature of Agent

Reg. No. 42,346
Phone (505) 665-3111

Samuel L. Borkowsky
Los Alamos National Laboratory
LC/BPL, MS A187
Los Alamos, New Mexico 87545